35,000 OF US ARE GOING TO PLACES THAT NO OTHER PERSON CAN REACH

Getting your electricity up and running is one of the primary public service missions of our 35,000-strong team. Every day in all weathers, regardless of your electricity supplier, we maintain, repair and install thousands of miles of power distribution lines, right down to the last yard. The one that leads to your door.
ERDF definition of a Smart Grid

An electricity network that can integrate the action of all connected users in order to efficiently deliver a high-quality, sustainable, economic and secure electricity supply...
Smart Grids: layers of “added value” based on the use of ICTs
Reasons for ERDF implementation of a smartgrid:

To provide a consistent response to society’s concerns

- Better integration of renewable energies into the network
- Installation of charge points for electric vehicles
- Reduction of network losses

Respond to the challenges identified at the Grenelle environment round table

- Better integration of renewable energies into the network
- Installation of charge points for electric vehicles
- Reduction of network losses

Facilitate the implementation of local energy policies

- Assistance for local authorities in implementing their energy policies
- Assistance in the development of local climate/energy plans

Facilitate the smooth functioning of the electricity market

- Improvement of customer satisfaction
- Possibility of developing new offers
- Easier management of customer network interventions

Respond to new customer expectations

- Real-time monitoring of consumption
- Data availability
- Facilitate the provision of new services by suppliers

Optimise the management of the electrical power distribution network

- Simplification of failure diagnosis procedures to speed up repairs
- Management of the supply/demand balance
- Remote interventions
- Optimisation of network maintenance
The smartgrid challenges facing ERDF

- Successfully deploy Linky, the 1st building block in ERDF smartgrid
- Help customers to reduce their energy consumption
- Increase the energy efficiency of the network
- Integrate distributed, intermittent, renewable energy production
- Prepare for the integration of emerging uses (electric vehicles, storage)
- Increase existing network automation
- Ensure supply quality and security, maintain local and national supply/demand balances
- Prepare for and monitor changes in communication standards
- Collect, process and exploit large quantities of data
- Support the development of local Climate and Energy Plans
- Implement industrial demonstration projects with partners
Experimental projects conducted with industrial partners

To efficiently develop the smartgrids of the future, ERDF is:

- managing national projects (Greenlys, NiceGrid, Venteea)
- coordinating the Grid4EU European project
- participating in the French Eco-Cities/Cities of Tomorrow projects and in the ADDRESS European project
ERDF smartgrids demonstration projects

- Demonstration projects under French National funding
  - Final discussions with the Ministry of Energy

- Greenlys
  - Smart urban network in Lyons and Grenoble
  - Use of Linky (AMM) to improve network management

- Nice Grid
  - Smart urban district with a high level of PV generation
  - Active demand and storage solutions
  - Micro-grids
  - part of GRID4EU
Nice Grid: smart solar district
Business and regulatory models

- Market for smart electrical systems is substantial and attracts many new players (information and telecommunications, car manufacturing, storage and aggregation), in addition to traditional energy suppliers.

- They are all looking to establish a viable business model within the framework of a “smart” market regulation system.

- For example, distributors currently apply a regulated price based on the amount of electricity supplied to the networks, while the “3 x 20” EU objectives encourage customers to reduce their energy consumption and to partly produce it themselves in the future...
Thank you for listening